

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Maria G. Castellanos et al.	§	Art Unit:	3627
		§		
Serial No.:	10/672,356	§		
		§	Examiner:	Fawaad Haider
Filed:	September 26, 2003	§		
		§		
For:	Method and System to Determine if a	§	Atty. Dkt. No.:	200310994-1
	Composite Service Level Agreement	§		(HPC.0477US)
	(SLA) Can Be Met	§		

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Commissioner for Patents

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Alexandria, VA 22313-1450

APPEAL BRIEF PURSUANT TO 37 C.F.R § 41.37

Sir:

The final rejection of claims 1-5 and 20-34 is hereby appealed.

I. REAL PARTY IN INTEREST

The real party in interest is the Hewlett-Packard Development Company, LP. The Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF THE CLAIMS

Claims 1-5 and 20-34 have been finally rejected and are the subject of this appeal. Claims 6-19 have been cancelled.

IV. STATUS OF AMENDMENTS

No Amendment was made after the Final Office Action mailed on September 18, 2008. All amendments have therefore been entered.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element.

Independent claim 1 recites a method of determining whether a composite service level agreement (SLA) may be met comprising:

calculating a baseline metric value for each of a plurality of component SLAs (Fig. 1:151-154) in a computing system that operate to form a composite SLA (Fig. 1:170; Spec., p. 5, ¶ [0020], lines 8-9; p. 5, ¶ [0021], lines 1-5; p. 7 ¶ [0024], lines 37-52);

comparing a historical metric value for each of the plurality of component SLAs to their respective baseline metric value to determine if each historical metric is sufficient to ensure that the composite SLA is met (Spec., p. 7 ¶ [0024], lines 37-52).

Independent claim 30 recites a computer readable medium storing programs executable by a processor that, when executed, perform a method comprising:

calculating a baseline metric value for each of a plurality of component SLAs (Fig. 1:151-154) in a computing system that operate to form a composite SLA (Fig. 1:170; Spec., p. 5, ¶ [0020], lines 8-9; p. 5, ¶ [0021], lines 1-5; p. 7 ¶ [0024], lines 37-52);

comparing a historical metric value for each of the plurality of component SLAs to their respective baseline metric value to determine if each historical metric value is sufficient to ensure that the composite SLA is met (Spec., p. 7 ¶ [0024], lines 37-52).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Claim 30 rejected as being indefinite under 35 U.S.C. § 112, ¶ 2 for failing to particularly point out and distinctly claim the subject matter of the invention.**
- B. Claims 1-5 and 20-24 rejected as being unpatentable under 35 U.S.C. § 103(a) over Brichta (U.S. Patent No. 5,864,483) in view of Underwood (U.S. Patent No. 6,523,027).**
- C. Claims 25-29 rejected as being unpatentable under 35 U.S.C. § 103(a) over Brichta (U.S. Patent No. 5,864,483) in view of Underwood (U.S. Patent No. 6,523,027) and further in view of McGee (U.S. Patent Publication No. 2003/0079160).**
- D. Claims 30-34 rejected as being unpatentable under 35 U.S.C. § 103(a) over McGee (U.S. Patent Publication No. 2003/0079160) in view of Shay (U.S. Patent Publication No. 2004/0153563).**

VII. ARGUMENT

The claims do not stand or fall together. Instead, Appellant presents separate arguments for various independent and dependent claims. Each of these arguments is separately argued below and presented with separate headings and sub-headings as required by 37 C.F.R. § 41.37(c)(1)(vii).

A. Claim 30 rejected as being indefinite under 35 U.S.C. § 112, ¶ 2 for failing to particularly point out and distinctly claim the subject matter of the invention.

1. Claim 30.

The term “sufficient” used in the last clause of claim 30 was rejected by the Examiner as being indefinite. The last clause of claim 30 is reproduced below:

comparing a historical metric value for each of the plurality of component SLAs to their respective baseline metric value to determine if each historical metric value is sufficient to ensure that the composite SLA is met.

Appellant respectfully disagrees with the Examiner’s assertion that use of the term “sufficient” in claim 30 is indefinite. The claimed subject matter has a meaning discernible to a person of ordinary skill in the art. The last clause of claim 30 recites comparing a historical metric value for each of a plurality of component SLAs to their respective baseline metric value to determine if each historical metric value is sufficient to ensure that the composite SLA is met. Claim 30 itself provides a specific standard by which “each historical metric value is sufficient to ensure that the composite SLA is met”—this is based on comparing the historical metric value for each of the plurality of components SLAs to their respective baseline metric value.

The Specification provides detailed explanations of such comparisons between historical metric values and respective baseline metric values, and provides examples to illustrate such comparisons. *See* Specification, pages 6-9. For example, page 7 of the Specification refers to a “required success rate” as being an example of a “baseline metric value.” The required success rate is compared with a historical success rate, and if the historical success rate is less than a required success rate, then a conflict is indicated and the composite SLA may not be promised.

A person of ordinary skill in the art would understand from the language of claim 30 that based on the comparison of the historical metric value for each component SLA to its respective baseline metric value, a determination can be made whether or not the historical metric value has

a value to be able to meet a composite SLA. Thus, the metes and bound of claim 30 can be ascertained by a person of ordinary skill in the art, and therefore, claim 30 is not indefinite under § 112, ¶ 2.

Therefore, reversal of the § 112, ¶ 2 rejection is respectfully requested.

B. Claims 1-5 and 20-24 rejected as being unpatentable under 35 U.S.C. § 103(a) over Brichta (U.S. Patent No. 5,864,483) in view of Underwood (U.S. Patent No. 6,523,027).

1. Claims 1, 20.

It is respectfully submitted that independent claim 1 is non-obvious over Brichta and Underwood.

To make a determination under 35 U.S.C. § 103, several basic factual inquiries must be performed, including determining the scope and content of the prior art, and ascertaining the differences between the prior art and the claims at issue. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 U.S.P.Q. 459 (1965). Moreover, as the U.S. Supreme Court held, it is important to identify a reason that would have prompted a person of ordinary skill in the art to combine reference teachings in the manner that the claimed invention does. *KSR International Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741, 82 U.S.P.Q.2d 1385 (2007).

Here, it is respectfully submitted that a comparison of the hypothetical teachings of Brichta and Underwood will reveal that such teachings are significantly different from the claimed subject matter.

The Examiner conceded that Brichta fails to disclose a historical metric value, which is a concession that Brichta fails to disclose “comparing a historical metric value for each of the plurality of component SLAs to their respective baseline metric value to determine if each historical metric is sufficient to ensure that the composite SLA is met.” However, the Examiner

argued that Underwood purportedly discloses the claimed feature conceded to be missing from Brichta. *Id.*

A first point of error made by the Examiner is the incorrect assertion that Brichta discloses “a plurality of component SLAs in a computing system that operate to form a composite SLA.” With respect to the “calculating” clause of claim 1, the Examiner cited the following passages of Brichta: column 6, lines 12-19; column 11, lines 32-41. The cited column 6 passage of Brichta refers to a level of service provided to a customer that is in accordance with a service level standard (SLS) or a service level agreement (SLA). The cited column 11 passage of Brichta refers to a service level agreement A and a service level agreement B. Neither of these passages provide any hint of disclosing a plurality of component SLAs that operate to form a composite SLA.

In the passage of column 11 of Brichta cited by the Examiner, reference is made to SLAs, SLA A and SLA B, as depicted in Fig. 3B of Brichta. In Fig. 3B, a dashed line 58 represents SLA A, and a dashed line 60 represents SLA B. Fig. 3B also depicts occurrences of services in an information processing environment. Brichta, 11:26-29. The plotting of the occurrences of services made in Fig. 3B of Brichta is to allow for detection of occurrences that fall within a danger zone. Brichta, 11:55-59. Such occurrences that fall within the danger zone are identified and details regarding such occurrences are stored. Brichta, 14:45-48. There is nothing anywhere in Brichta to even remotely hint at calculating a baseline metric value for each of a plurality of component SLAs that operate **to form a composite SLA**, nor is there any teaching in Brichta to hint at comparing a historical metric value for each of the plurality of component SLAs to their respective baseline metric value to determine if each historical metric is sufficient to ensure that **the composite SLA is met**.

The above constitutes a first point of error in the obviousness rejection.

A second point of error made in the obviousness rejection is the incorrect assertion that Underwood discloses “comparing a historical metric value for each of the plurality of component SLAs to their respective baseline metric value to determine if each historical metric is sufficient to ensure that the composite SLA is met,” where the composite SLA is formed from the plurality of component SLAs. On page 3 of the Office Action, the Examiner cited to the following passage of Underwood: column 249, lines 9-28. This cited passage of Underwood refers to baselining and discovery tools that are used to get information about the current state of an existing network for a network baseline. A baseline analysis is used to determine the normal state of the network, for use as a benchmark against a reference point for historical trend analysis. The cited passage also notes that baselining tools collect network traffic statistics and produce reports. Nowhere in this cited passage of Underwood is there any hint of comparing a historical metric value for each of a plurality of component SLAs to their respective baseline metric value to determine if each historical metric is sufficient to ensure that the composite SLA is met. No hint is provided by Underwood of either component SLAs or the composite SLA.

The Response to Arguments section of the Office Action also refers to a passage in column 250, lines 62 to column 251, line 5 of Underwood. This passage of Underwood refers to reports that describe how a metric is trending relative to a baseline. Also, the cited passage refers to examining such report every day or once a week. Also, the cited passage refers to a mechanism by which an alert is provided when a particular metric has changed in a significant manner. Again, this passage of Underwood provides absolutely no hint of the “comparing” element of claim 1, which refers to a baseline metric value for each of a plurality component

SLAs and a determination of whether each historical metric is sufficient to ensure that the composite SLA is met.

Since the hypothetical combination of Brichta and Underwood would not have led to the claimed subject matter, the obviousness rejection of claim 1 is defective for at least this reason.

Moreover, no reason existed that would have prompted a person of ordinary skill in the art to combine the teachings of Brichta and Underwood to achieve the claimed invention. As noted above, Fig. 3B of Brichta shows individual SLAs and plotting of occurrences of services to enable comparison of such occurrences with respect to the individual SLAs. There is no hint given in Fig. 3B, or anywhere else in Brichta, that it would be desirable to form a composite SLA to determine if a historical metric is sufficient to ensure that the composite SLA is met.

Underwood similarly fails to provide any hint of the claimed subject matter, since Underwood merely refers to performing baselining to determine a normal state of a network, as a benchmark to analyze troubleshooting data against, and a reference point for historical trend analysis. Underwood, 249:9-16. There is absolutely no hint in Underwood of a plurality of component SLAs to form a composite SLA, nor is there any hint of a comparison of historical metric values to baseline metric values to determine if each historical metric is sufficient to ensure that the composite SLA is met. Therefore, a person of ordinary skill in the art would not have found any reason to combine the teachings of Underwood and Brichta to achieve the claimed invention.

In view of the above, the obviousness rejection of claim 1 and its dependent claims is clearly in error.

Reversal of the final rejection of the above claims is respectfully requested.

2. Claim 2.

Claims 2 depends from claim 1, and therefore, is allowable for at least the same reasons as claim 1.

Moreover, claim 2 recites that calculating the baseline metric value for each of the plurality of component SLAs further comprises calculating a baseline **success rate for each of the plurality of component SLAs** from historical data. With respect to claim 2, the Examiner cited column 3, line 46, of Brichta. 9/18/2008 Office Action at 3. The cited passage of Brichta refers to an environment in which occurrences correspond to services, and characteristics of such occurrences include turnaround time, response time, or successful completion of a service request. Nowhere in this passage of Brichta, or anywhere else in Brichta, is there any hint of a baseline success rate for each of a plurality of component SLAs that is calculated from historical data, as recited in claim 2.

Claim 2 is therefore further allowable for the foregoing reason.

Reversal of the final rejection of the above claim is respectfully requested.

3. Claim 3.

Claim 3 depends from claim 2, and therefore, is allowable for at least the same reasons as claim 2.

Moreover, claim 3 further recites comparing a historical success rate for each of the plurality of component SLAs to their respective baseline success rates to determine if each historical success rate is greater than or equal to each respective baseline success rate.

With respect to claim 3, the Examiner cited the following passage of Underwood: column 249, lines 9-28. There is absolutely nothing in this passage of Underwood to even remotely hint at comparing a historical success rate for each of a plurality of component SLAs to their

respective baseline success rates to determine if each historical success rate is greater than or equal to each respective baseline success rate.

Claim 3 is therefore further allowable for the foregoing reason.

Reversal of the final rejection of the above claim is respectfully requested.

4. Claim 4.

Claim 4 depends from claim 1, and therefore, is allowable for at least the same reasons as claim 1.

Moreover, claim 4 recites calculating a baseline failure rate for each of the plurality of component SLAs from historical data. With respect to claim 4, the Examiner cited column 3, line 46, of Brichta, which refers to a turnaround time, response time, or successful completion of a service request. This passage provides absolutely no hint of calculating a baseline failure rate for each of a plurality of component SLAs from historical data.

Therefore, claim 4 is further allowable for the foregoing reason.

Reversal of the final rejection of the above claim is respectfully requested.

5. Claim 5.

Claim 5 depends from claim 4, and therefore, is allowable for at least the same reasons as claim 4.

Moreover, claim 5 recites comparing a historical failure rate for each of the plurality of component SLAs to their respective baseline failure rates to determine if each historic failure rate is less than or equal to the respective failure rate for each of the component SLAs.

No such comparison of historical failure rates for component SLAs to respective baseline failure rates is performed by Underwood, contrary to the assertion by the Examiner.

Therefore, claim 5 is further allowable for the foregoing reason.

Reversal of the final rejection of the above claim is respectfully requested.

6. Claim 21.

Claim 21 depends from claim 3, and is therefore allowable for at least the same reasons as claim 3. Moreover, claim 21 recites indicating that the composite SLA cannot be met in response to determining that any of the historical success rates is less than the respective baseline success rate. With respect to claim 21, the Examiner cited column 11, lines 26-64, of Brichta. The cited passage refers to Fig. 3B of Brichta, which illustrates a control graph. The cited column 11 passage of Brichta refers to a service level standard (SLS) line that defines a standard level of service afforded to customers for a particular characteristic of the control graph. The cited column 11 passage also refers to two lines that represent service level agreement A and service level agreement B, respectively. Nowhere in the column 11 passage of Brichta, or in Fig. 3B of Brichta, is there any hint of indicating that the composite SLA cannot be met in response to determining that any of the historical success rates is less than the respective baseline success rate.

Claim 21 is therefore further allowable for the foregoing reason. Reversal of the final rejection of the above claim is respectfully requested.

7. Claim 22.

Claim 22 depends from claim 5 and is therefore allowable for at least the same reasons as claim 5. Moreover, claim 22 recites indicating that the composite SLA cannot be met in response to determining that any of the historical failure rates is greater than the respective baseline failure rate. With respect to claim 22, the Examiner cited the same passage of Brichta that was cited

against claim 21. Nowhere in this cited passage of Brichta is there any hint of indicating that a composite SLA cannot be met in response to determining that any of the historical failure rates is greater than the respective baseline failure rate.

Claim 22 is therefore further allowable for the foregoing reason. Reversal of the final rejection of the above claim is respectfully requested.

8. Claims 23, 24.

Claim 23 depends from claim 1 and is therefore allowable for at least the same reasons as claim 1. Moreover, claim 23 recites that calculating the baseline metric value for each of a plurality of component SLAs is based on a desired success rate for a composite system having multiple component services associated with corresponding component SLAs.

With respect to claim 23, the Examiner again cited to Fig. 3B and column 11, lines 26-64, of Brichta, which provide no hint whatsoever of calculating a baseline metric value that is based on a desired success rate for a composite system having multiple services associated with corresponding component SLAs.

Claim 23 and its dependent claim 24 are therefore further allowable for the foregoing reason. Reversal of the final rejection of the above claims is respectfully requested.

C. Claims 25-29 rejected as being unpatentable under 35 U.S.C. § 103(a) over Brichta (U.S. Patent No. 5,864,483) in view of Underwood (U.S. Patent No. 6,523,027) and further in view of McGee (U.S. Patent Publication No. 2003/0079160).

1. Claims 25-29.

In view of the defective rejection of base claim 1 over Brichta and Underwood, it is respectfully submitted that the obviousness rejection of dependent claims 25-29 over Brichta, Underwood, and McGee is also defective.

Therefore, reversal of the final rejection of the above claims is respectfully requested.

D. Claims 30-34 rejected as being unpatentable under 35 U.S.C. § 103(a) over McGee (U.S. Patent Publication No. 2003/0079160) in view of Shay (U.S. Patent Publication No. 2004/0153563).

1. Claim 30.

Independent claim 30 was rejected as purportedly obvious over McGee in view of Shay.

The Examiner conceded that McGee fails to disclose “component SLAs.” 9/18/2008 Office Action at 6. This concession necessarily means that McGee fails to disclose calculating a baseline metric value for each of a plurality of component SLAs in a computing system that operate to form a composite SLA, and comparing a historical metric value for each of the plurality of component SLAs to their respective baseline metric value to determine that each historical metric value is sufficient to ensure that the composite SLA is met, as recited in claim 30. In other words, this concession by the Examiner necessarily means that McGee fails to disclose any element of claim 30.

As purportedly disclosing subject matter missing from McGee, the Examiner cited Shay. *Id.* Specifically, the Examiner referred to ¶ [0005] of Shay, which refers to a service level metric (such as a response time metric) and component metrics of the service level metric. There is no

mention in ¶ [0005] of Shay of component SLAs that operate to form a composite SLA—the reference to metrics does not provide a teaching of component SLAs.

Paragraph [0012] of Shay refers to service level agreements (SLAs), and providing warning of possible SLA violations. However, although reference is made to SLA generally, there is nothing here regarding component SLAs that operate to form a composite SLA. Thus, Shay also does not provide any teaching or hint of calculating a baseline metric value for each of a plurality of component SLAs in a computing system that operate to form a composite SLA. Shay also fails to disclose comparing a historical metric value for each of the plurality of component SLAs to their respective baseline metric value to determine if each historical metric value is sufficient to ensure that a composite SLA is met.

In view of the foregoing, it is clear that even if McGee and Shay could be hypothetically combined, the hypothetical combination of the references would not have led to the claimed subject matter. Therefore, the obviousness rejection of claim 30 and its dependent claims is in error.

Reversal of the final rejection of the above claim is respectfully requested.

2. Claim 31.

Claim 31 depends from claim 30 and is therefore allowable for at least the same reason as claim 30. Moreover, claim 31 recites calculating a baseline success rate for each of the plurality of component SLAs from historical data. With respect to claim 31, the Examiner cited the following passage of McGee: ¶¶ [0065, 0073, 0130]. None of these passages provide any hint of calculating a baseline success rate for each of a plurality of component SLAs from historical data. Paragraph [0065] of McGee refers to modifying provisional thresholds by a baseline filtering process. There is no mention of a baseline success rate for a component SLA. Paragraph

[0073] of McGee refers to a baseline filter that uses recent history of statistics of metrics to filter the estimated mean and standard deviation. Again, there is absolutely no hint here of calculating a baseline success rate for each component SLA. Paragraph [0130] of McGee refers to varied weights that are based on baseline history. There is no mention or hint here of a baseline success rate for each component SLA.

Claim 31 is further allowable for the foregoing reason. Reversal of the final rejection of the above claim is respectfully requested.

3. Claim 32.

Claim 32 depends from claim 31 and is therefore allowable for at least the same reasons as claim 31. Moreover, claim 32 recites comparing a historical success rate for each of the plurality of component SLAs to their respective baseline success rate to determine if each historical success rate is greater than or equal to each respective baseline success rate. With respect to claim 32, the Examiner cited the following passages of McGee: ¶¶ [0065, 0073, 0110-0112, 0130]. As discussed above in connection with claim 31, ¶¶ [0065, 0073, 0130] of McGee provide absolutely no hint whatsoever of a historical success rate for each component SLA. Therefore, McGee also provides no hint whatsoever of comparing a historical success rate for each component SLA to a respective baseline success rate.

The other passages of McGee cited by the Examiner are ¶¶ [0110-0112], which refers to applying a baseline filter and computing SPC limits, determining if a good fit was found for the data, and using a baseline filter along with recent history of the limits to filter the limit values. Nowhere in these passages of McGee is there any hint of comparing a historical success rate for each component SLA to a respective baseline success rate.

Claim 32 is therefore further allowable for the foregoing reason.

4. Claim 33.

Claim 33 depends from claim 30 and is therefore allowable for at least the same reasons as claim 30. Moreover, claim 33 recites calculating a baseline failure rate for each component SLA from historical data. With respect to claim 33, the Examiner cited the same passages of McGee as cited against claim 31. There is no mention in these cited passages of McGee of calculating a baseline failure rate for each component SLA.

Therefore, the obviousness rejection of claim 33 is also further defective. Reversal of the final rejection of the above claim is respectfully requested.

5. Claim 34

Claim 34 depends from claim 33 and is therefore allowable for at least the same reasons as claim 33. Moreover, claim 34 recites comparing a historical failure rate for each component SLA to a respective baseline failure rate. With respect to claim 34, the Examiner cited the same passages of McGee as cited against claim 32. These passages provide no hint whatsoever of comparing a historical failure rate for each component SLA to a respective baseline failure rate.

Claim 34 is therefore further allowable for the foregoing reason. Reversal of the final rejection of the above claim is respectfully requested.

CONCLUSION

In view of the foregoing, reversal of all final rejections and allowance of all pending claims is respectfully requested.

Respectfully submitted,



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VIII. APPENDIX OF APPEALED CLAIMS

The claims on appeal are (claims 6-19 have been cancelled):

- 1 1. A method of determining whether a composite service level agreement (SLA) may be
2 met comprising:
 - 3 calculating a baseline metric value for each of a plurality of component SLAs in a
4 computing system that operate to form a composite SLA;
 - 5 comparing a historical metric value for each of the plurality of component SLAs to their
6 respective baseline metric value to determine if each historical metric is sufficient to ensure that
7 the composite SLA is met.
- 1 2. The method as defined in claim 1 wherein calculating the baseline metric value for each
2 of the plurality of component SLAs further comprises calculating a baseline success rate for each
3 of the plurality of component SLAs from historical data.
- 1 3. The method as defined in claim 2 wherein comparing the historical metric value for each
2 of the plurality of component SLAs further comprises comparing a historical success rate for
3 each of the plurality of component SLAs to their respective baseline success rates to determine if
4 each historical success rate is greater than or equal to each respective baseline success rate.
- 1 4. The method as defined in claim 1 wherein calculating a baseline metric value for each of
2 the plurality of component SLAs further comprises calculating a baseline failure rate for each of
3 the plurality of component SLAs from historical data.
- 1 5. The method as defined in claim 4 wherein comparing a historical metric value for each of
2 the plurality of component SLAs further comprises comparing a historical failure rate for each of
3 the plurality of component SLAs to their respective baseline failure rates to determine if each
4 historic failure rate is less than or equal to the respective failure rate for each of the component
5 SLAs.

20. The method of claim 1, further comprising indicating that the composite SLA cannot be met in response to determining that any of the historical metric values is insufficient when compared to the respective baseline metric value.

21. The method of claim 3, further comprising indicating that the composite SLA cannot be met in response to determining that any of the historical success rates is less than the respective baseline success rate.

22. The method of claim 5, further comprising indicating that the composite SLA cannot be met in response to determining that any of the historical failure rates is greater than the respective baseline failure rate.

23. The method of claim 1, wherein calculating the baseline metric value for each of the plurality of component SLAs is based on a desired success rate for a composite system having multiple component services associated with the corresponding component SLAs.

24. The method of claim 23, wherein calculating the baseline metric value for each of the plurality of component SLAs is further based on:
calculating a combined historical failure rate of the component services; and
determining a contribution of each component service to the combined historical failure, wherein each baseline metric value is based on the respective determined contribution.

25. The method of claim 1, further comprising:
calculating a combined metric value from historical data for sequential component SLAs that operate sequentially to contribute to the composite SLA; and
comparing the combined metric value to a target combined metric value to determine if the combined metric value is sufficient to meet the target combined metric value.

26. The method of claim 25, wherein calculating the combined metric value further comprises calculating a component probability distribution function (PDF) for each sequential component SLA.

1 27. The method of claim 26, wherein calculating the combined metric value further
2 comprises computing a composite PDF from the component PDFs.

1 28. The method of claim 27, wherein computing a composite PDF from the component PDFs
2 further comprises performing a convolution of the component PDFs for each component SLA.

1 29. The method of claim 27, wherein calculating the combined metric value further
2 comprises:
3 calculating a cumulative distribution function (CDF) from the composite PDF;
4 determining the combined metric value by locating a value of the cumulative CDF at the
5 target combined metric value.

1 30. A computer readable medium storing programs executable by a processor that, when
2 executed, perform a method comprising:
3 calculating a baseline metric value for each of a plurality of component SLAs in a
4 computing system that operate to form a composite SLA;
5 comparing a historical metric value for each of the plurality of component SLAs to their
6 respective baseline metric value to determine if each historical metric value is sufficient to
7 ensure that the composite SLA is met.

1 31. The computer readable medium as defined in claim 30 wherein calculating the baseline
2 metric value for each of the plurality of component SLAs further comprises calculating a
3 baseline success rate for each of the plurality of component SLAs from historical data.

1 32. The computer readable medium as defined in claim 31 wherein comparing the historical
2 metric value for each of the plurality of component SLAs further comprises comparing a
3 historical success rate for each of the plurality of component SLAs to their respective baseline
4 success rates to determine if each historical success rate is greater than or equal to each
5 respective baseline success rate.

1 33. The computer readable medium as defined in claim 30 wherein calculating a baseline
2 metric value for each of the plurality of component SLAs further comprises calculating a
3 baseline failure rate for each of the plurality of component SLAs from historical data.

1 34. The computer readable medium as defined in claim 33 wherein comparing a historical
2 metric value for each of the plurality of component SLAs further comprises comparing a
3 historical failure rate for each of the plurality of component SLAs to their respective baseline
4 failure rates to determine if each historic failure rate is less than or equal to the respective failure
5 rate for each of the component SLAs.

IX. EVIDENCE APPENDIX

None

X. RELATED PROCEEDINGS APPENDIX

None.